

ABSTRACT

1 X N OR N X 1 OPTICAL SWITCH HAVING A PLURALITY OF MOVABLE LIGHT GUIDING MICROSTRUCTURES

5 A 1 x N or N x 1 optical switch based on a plurality of movable MEMS-
created platforms, each carrying a light guiding structure such as a waveguide, where the
position of the platforms determines which optical path is connected through the optical
switch. The MEMS-created platforms are formed integral with the substrate of the
optical switch. The waveguides residing on the movable platforms gradually change the
10 direction of the optical signal in order to minimize losses. The movable platforms can
move linearly or rotationally, for example. Also described is a method for fabricating
such an optical switch and its components by etching from the bottom of the substrate
and through the oxide.

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